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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/449,611	11/30/1999	KAZUO SHIMURA	Q56989	6474

7590 01/15/2003

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[REDACTED] EXAMINER

PARKER, KENNETH

[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

2871

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/449,611	Applicant(s) Shimura
Examiner Kenneth Parker	Art Unit 2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on Jun 27, 2002

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) Claim(s) 15-25 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 15-25 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

4) Interview Summary (PTO-413) Paper No(s). _____

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

6) Other: _____

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DETAILED ACTION

Allowable Subject Matter

Claims amended to have the pixel density 3 times larger in the horizontal direction than the vertical direction where the black and white display is more than intended use would be allowable. The specification discusses projectors configured so the normal color sub-pixels are configured to display only black and white, giving a density 3 times larger in the horizontal direction than the vertical direction for black and white display, a configuration not found by the examiner.

Claim Rejections - 35 USC § 102

1. **Claim 15-20, 22, 24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Parulskie et al, U.S. Patent # 5,828,406.**

This reference discloses LCD's having pixels with widths 2/3rds of their heights (column 1, lines 60-65). Parulski discusses the remapping of the pixels (see abstract associated figure). Therefore, these claims are anticipated by this reference.

2. **Claims 15, 17-24 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ishimoto et al, U.S. Patent # 5,594,564.**

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This reference discloses pixels with a 30 to 1 height to width (see abstract, title and associated figures). Therefore, these claims are anticipated by this reference.

3. Claim 15, 17-24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Aoki et al, U.S. Patent # 4,654,117.

Aoki discloses a liquid crystal device in which three pixel electrodes with a width of approximately 1/3 of the high are used side by side to create a full color display. As discussed in the rejection under 112 above, it is unclear what meaning applicant is intending to use for pixel, so the common usage established in the LCD technology of a pixel being defined by the pixel electrode. Therefore, the disclosures of figures 6 and 7 anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parulskie et al, U.S. Patent # 5,828,406.

Lacking form the disclosure is the claimed brightness level. **It was well known that higher brightness was more desirable for the end user, and therefore it would have been obvious, to employ a high brightness light source producing a high brightness image as was well known in the industry as desirable.

5. Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishimoto et al, U.S. Patent # 5,594,564.

Lacking form the disclosure is the claimed brightness level. It was well known that higher brightness was more desirable for the end user, and therefore it would have been obvious, to employ a high brightness light source producing a high brightness image as was well known in the industry as desirable.

Additionally, the rescaling of images and the conversion of a black and white image to be displayed in a color display were **conventionally employed in computers which drove LCDs,

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and well known for enabling the viewing of arbitrary images, and therefore obvious for the conventional nature as well as the advantage of enabling the viewing of arbitrary images.

6. Claims 16 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki et al, U.S. Patent # 4,654,117.

Lacking from the disclosure is the claimed brightness level. It was well known that higher brightness was more desirable for the end user, and therefore it would have been obvious, to employ a high brightness light source producing a high brightness image as was well known in the industry as desirable.

Additionally, the rescaling of images and the conversion of a black and white image to be displayed in a color display were **conventionally employed in computers which drove LCDs, and well known for enabling the viewing of arbitrary images, and therefore obvious for the conventional nature as well as the advantage of enabling the viewing of arbitrary images.

***Any item marked with (**) is given as official notice.*

Note: Any assertions that an element, practice or relationship was conventional has the incorporates the motivations of the benefits of having established supply chains, well understood behavior and manufacturing methodologies.

Response to Arguments

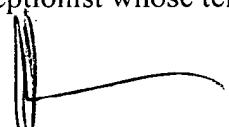
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The "black and white" aspect is only in the preamble, and therefore only given weight as intended use. As any display can display a black and white image, this limitation is therefore met. Regarding pitches of 1.2 times, that was one of the conventional configurations (as discussed in earlier actions), and therefore even if the black and white limitation were realized in the claims in more than an intended use fashion would still not be allowable. The three times pitches, however, were solely done for implementation of color by the prior art found, and therefore these claims would become allowable. For assistance in more fully realizing the black and white limitation in the claims, please contact the examiner at the telephone number listed below.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Parker whose telephone number is **(703) 305-6202**. The fax phone number for this Group is **(703) 308-7722**. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist whose telephone number is **(703) 308-0956**.

January 13, 2003



**KENNETH ALLEN PARKER
PRIMARY PATENT EXAMINER
GAU 2871**